

output 115. Audio speakers 116 generate an audio output to enhance the user's playing experience. Numerous other types of devices may be included in gaming machines that may be used according to the present invention.

[0059] FIG. 7 shows a logical and hardware block diagram 200 of gaming machine 100 which includes a central processing unit (CPU) 205 along with random access memory 206 and nonvolatile memory or storage device 207. All of these devices are connected on a system bus 208 with an audio controller 209, a network controller 210, and a serial interface 211. A graphics processor 215 is also connected on system bus 208 and is connected to drive primary video display device 104 and secondary video display device 107 (both mounted on cabinet 101 as shown in FIG. 6). A second graphics processor 216 is also connected on system bus 208 in this example to drive the auxiliary display device 109 also shown in FIG. 6. Gaming machine 100 also includes a touch screen controller 217 connected to system bus 208. Touch screen controller 217 is also connected via signal path 218 to receive signals from a touchscreen element associated with primary video display device 104. It will be appreciated that the touchscreen element itself typically comprises a thin film that is secured over the display surface of primary video display device 104. The touchscreen element itself is not illustrated or referenced separately in the figures.

[0060] Those familiar with data processing devices and systems will appreciate that other basic electronic components will be included in gaming machine 100 such as a power supply, cooling systems for the various system components, audio amplifiers, and other devices that are common in gaming machines. These additional devices are omitted from the drawings so as not to obscure the present invention in unnecessary detail.

[0061] All of the elements 205, 206, 207, 208, 209, 210, and 211 shown in FIG. 7 are known elements used in the gaming machine industry. These elements are preferably mounted in a computer chassis which is housed in cabinet 101 shown in FIG. 6. Alternatively, the various electronic components may be mounted on one or more circuit boards or modules housed within cabinet 101 without a separate enclosure. Those familiar with data processing systems and the various data processing elements shown in FIG. 7 will appreciate that many variations on this illustrated structure may be used within the scope of the present invention. For example, since serial communications are commonly employed to communicate with a touch screen controller such as touch screen controller 217, the touch screen controller may not be connected on system bus 208, but instead include a serial communications line to serial interface 211, which may be a USB controller or a IEEE 1394 controller for example. It will also be appreciated that some of the devices shown in FIG. 7 as being connected directly on system bus 208 may in fact communicate with the other system components through a suitable expansion bus. Audio controller 209, for example, may be connected to the system via a PCI bus. System bus 208 is shown in FIG. 7 merely to indicate that the various components are connected in some fashion for communication with CPU 205 and is not intended to limit the invention to any particular bus architecture. Numerous other variations in the gaming machine internal structure and system may be used without departing from the principles of the present invention.

[0062] Although separate graphics processor 215 is shown for controlling primary video display device 104 and sec-

ondary video display device 107, and graphics processor 216 is shown for controlling both auxiliary display devices 108 and 109, it will be appreciated that CPU 205 may control all of the display devices directly without any intermediate graphics processor. The invention is not limited to any particular arrangement of processing devices for controlling the video display device included with gaming machine 100. Also, a gaming machine implementing the present invention is not limited to any particular number of video display devices or other types of display devices.

[0063] In the illustrated gaming machine 100, CPU 205 executes software which ultimately controls the entire gaming machine including the receipt of player inputs and the presentation of the graphic symbols displayed according to the invention through the display devices 104, 107, 108, and 109 associated with the gaming machine. As will be discussed further below, CPU 205 either alone or in combination with graphics processor 215 may implement a presentation controller for performing functions associated with a primary game that may be available through the gaming machine, and may also implement a game client for directing one or more display devices at the gaming machine to display the feature game mode according to the present invention. CPU 205 also executes software related to communications handled through network controller 210, and software related to various peripheral devices such as those connected to the system through audio controller 209, serial interface 211, and touch screen controller 217. CPU 205 may also execute software to perform accounting functions associated with game play. Random access memory 206 provides memory for use by CPU 205 in executing its various software programs, while the nonvolatile memory or storage device 207 may comprise a hard drive or other mass storage device providing storage for programs not in use or for other data generated or used in the course of gaming machine operation. Network controller 210 provides an interface to other components of a gaming system in which gaming machine 100 is included.

[0064] It should be noted that the invention is not limited to gaming machines employing the arrangement of processing devices and interfaces shown in example gaming machine 100. Other gaming machines through which the features herein are implemented may include one or more special purpose processing devices to perform the various processing steps for implementing the present invention, such as generating random numbers or checking the security status of software packages or gaming credit vouchers. Unlike processing devices such as CPU 205, these special purpose processing devices may not employ operational program code to direct the various processing steps.

[0065] Still referring to the hardware and logical block diagram 200 showing an example design for a gaming machine 100, the depicted machine in operation is controlled generally by CPU 205 which stores operating programs and data in memory 207 with game module 204, and software or drivers for user interface 220, network controller 210, audio/visual controllers, along with a controller for reel assembly 213 (if a mechanical reel configuration is used). The game module 204, once installed, also is held in non-volatile memory of the EGM, preferably a separate flash drive or hard drive from the memory holding the EGM operating system. CPU or game processor 205 may comprise a conventional microprocessor, such as an Intel microprocessor, mounted on a printed circuit board with support-